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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,111	10/23/2003	Sujal S. Parikh	14917.0236US01/MS305924.0	6567
27488 7590 08/02/2007 MERCHANT & GOULD (MICROSOFT) P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			EXAMINER RIES, LAURIE ANNE	
			ART UNIT 2176	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/692,111

Applicant(s)

PARIKH ET AL.

Examiner

Laurie Ries

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9-12 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9-12 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: Request for Continued Examination, filed 1 June 2007, to the Original Application, filed 23 October 2003.
2. The rejection of claim 17 under 35 U.S.C. 103(a) as being unpatentable over Holt (U.S. Patent 5,495,561) has been withdrawn, however, a new grounds of rejection has been added under 35 U.S.C. 103(a).
3. The rejection of claims 1, 3-7, and 12 under 35 U.S.C. 103(a) as being unpatentable over Holt (U.S. Patent 5,495,561) in view of Mueller ("Visual C# .NET Developer's Handbook"), hereafter referred to as Mueller, has been withdrawn, however, a new grounds of rejection has been added under 35 U.S.C. 103(a).
4. The rejection of claims 9-11 under 35 U.S.C. 103(a) as being unpatentable over Holt (U.S. Patent 5,495,561) in view of Mueller ("Visual C# .NET Developer's Handbook"), hereafter referred to as Mueller and Chiba (U.S. Publication 2005/0162694 A1) has been withdrawn, however, a new grounds of rejection has been added under 35 U.S.C. 103(a).

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5. Claims 1, 3-7, 9-12, and 17 are pending. Claims 14-16 and 18-19 have been withdrawn. Claims 2, 8, and 13 have been cancelled. Claims 1, 7, 12, and 17 are independent claims.

Request for Continued Examination

6. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 26 December 2006 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holt (U.S. Patent 5,495,561) in view of de Heus (U.S. Patent 5,390,354).

As per independent claim 17, Holt teaches a method for calculating page break information for a page in a computer system including receiving size information (See Holt, Column 17, lines 41-55)

Holt also teaches receiving page descriptor information (See Holt, Column 12, lines 15-20).

Holt also teaches causing a page break calculating function to provide page break information using the size information and page descriptor information (See Holt, Column 16, lines 46-67, and Column 17, lines 1-55).

Holt does not teach expressly that a page break calculation function may provide page break information that does not use renderable entities. De Heus teaches paginating a document based on the size, shape, and permitted page position of items and not on the content, or renderable entities, of the items (See De Heus, Column 2, lines 39-41). Holt and De Heus are analogous art because they are from the same field of endeavor of formatting electronic documents. At the time of the invention it would

have been obvious to one of ordinary skill in the art to include the pagination not using renderable entites of De Heus with the method for calculating page break information of Holt. The motivation for doing so would have been to provide a pagination function that can be used for any page format, any type or number of rules, and any type of item to be positioned on a page (See De Heus, Column 2, lines 29-32). Therefore, it would have been obvious to combine De Heus with Holt for the benefit of providing a pagination function that can be used for any page format, any type or number of rules, and any type of item to be positioned on a page.

While Holt does not teach expressly that the information is received as a parameter, it was well known in the art to use parameters to pass information. It would have been obvious to one of ordinary skill in the art to pass size information into a method or function as a parameter. The motivation for doing so would have been to provide for modularity of function, thus reducing the size of the various methods, and also to allow for the passing of variable data.

8. Claims 1, 3-7, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holt (U.S. Patent 5,495,561) in view of Mueller ("Visual C# .NET Developer's Handbook"), hereafter referred to as Mueller, and Agassi (U.S. Publication 2003/0217061 A1).

As per independent claims 1, 7, and 12, Holt teaches a system for hosting a paginating control and for controlling pagination of a presentable object in a computer application, including representing pages on which the presentable object is paginated as a finite page (See Holt, Figure 23, Column 25, lines 36-49, Figure 8, Column 13, lines 55-67, and Column 14, lines 1-8).

Holt also teaches methods of paginating an object (See Holt, Column 12, lines 56-67).

Holt also teaches methods of interacting with the paginating control (See Holt, Column 38, Claim 37).

Holt also teaches representing display information of a page (See Holt, Column 25, lines 36-52), representing descriptive information of a page (See Holt, Column 12, lines 15-20), representing page break information (See Holt, Column 12, lines 22-26), and representing positional information of content (See Holt, Column 12, lines 42-55).

While Holt does not teach expressly a set of user-definable classes and methods to interact with the classes, Holt does teach the use of object-oriented programming techniques, such as defining objects by creating classes and defining functions to manipulate the data (See Holt, Column 6, lines 53-55, and Column 7, lines 2-15). It was well known in the art at the time of the invention to include sets of user-definable classes and user-definable methods to operate on the user-definable classes in order to incorporate the techniques of Object-Oriented Programming (OOP). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the above

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mentioned OOP techniques to define specific functionality as disclosed by Holt. The motivation for doing so would have been to incorporate the inherent benefits of OOP, such as hiding a portion of the internal data structure and functions (i.e. encapsulation), allowing objects and functions that have the same format but that work with different data to function differently in order to produce consistent results (i.e. polymorphism), and to allow program developers to easily reuse pre-existing programs and to avoid creating software from scratch (i.e. inheritance) (See Holt, Column 6, lines 65-67, and Column 7, lines 1-54).

Holt does not teach expressly representing descriptive display information of a page in a sealed class, or creating customized classes to represent page break and positional information, however, use of sealed classes and custom classes in object-oriented programming was well established in the art at the time of the invention (See Mueller, Page 68, Chapter 4 – Overview, second paragraph, and Page 333, “Writing a Dataset Application”, second paragraph). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the properties of a sealed class to the descriptive information of Holt. The motivation for doing so would have been to provide a full implementation of all the methods contained within a particular class and to ensure that the methods contained within the class are not changed or overridden (See Mueller, Page 89, “Implementing Special Class Conditions”, second paragraph). It would also have been obvious at the time of the invention to one of ordinary skill in the art to create custom classes to represent page break information and pagination information based on content. The motivation for doing so would have been to

implement additional functionality not contained within standard classes, such as third party software or other non-standard functions.

Holt also does not teach expressly that the pagination is based on a content type. Agassi teaches paginating a document based on the content types of the articles to be included in the document (See Agassi, Page 7, paragraph 0094). Holt, Mueller, and Agassi are analogous art because they are from the same field of endeavor of controlling printed information. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the pagination based on content type of Agassi with the pagination of Holt. The motivation for doing so would have been to determine what types of content are renderable within the selected environment, thus providing only that content which would be possible to display in the document and which is relevant to the user (See Agassi, Page 7, paragraphs 0093 and 0096).

Therefore, it would have been obvious to combine Mueller and Agassi with Holt for the benefit of providing a full implementation of all the methods contained within a particular class and to ensure that the methods contained within the class are not changed or overridden and implementing additional functionality not contained within standard classes, such as third party software or other non-standard functions, and for the benefit of determining what types of content are renderable within the selected environment, thus providing only that content which would be possible to display in the document and which is relevant to the user, to obtain the invention as specified in claims 1, 7, and 12.

As per dependent claim 3, Holt and Mueller teach the limitations of claim 1 as described above. Holt also teaches a method for measuring the object for pagination and a method for arranging paginated pages of the object for display (See Holt, Column 18, lines 65-67, and Column 19, lines 1-8).

As per dependent claim 4, Holt and Mueller teach the limitations of claim 3 as described above. Holt also teaches a method for updating the pagination of an object (See Holt, Column 18, lines 56-64).

As per dependent claim 5, Holt and Mueller teach the limitations of claim 3 as described above. Holt also teaches a method for calculating page break positions for an object to be paginated (See Holt, Column 16, lines 45-61).

As per dependent claim 6, Holt and Mueller teach the limitations of claim 3 as described above. Holt also teaches a method for setting a host of the object (See Holt, Columns 35-36, Claim 12).

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9. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holt (U.S. Patent 5,495,561) in view of Mueller ("Visual C# .NET Developer's Handbook"), hereafter referred to as Mueller, and Agassi (U.S. Publication 2003/0217061 A1) as applied to claim 7 above, and further in view of Chiba (U.S. Publication 2005/0162694 A1).

As per dependent claim 9, Holt, Mueller, and Agassi teach the limitations of claim 7 as described above. Holt, Mueller, and Agassi do not teach expressly receiving notification that content in an object has changed. Chiba teaches providing notification regarding the status of print data (See Chiba, Page 5, paragraph 0110). Holt, Mueller, Agassi and Chiba are analogous art because they are from the same field of endeavor of controlling printed information. At the time of the invention it would have been obvious to one of ordinary skill in the art to provide notification of a change of Chiba with the change in content in an object of Holt, Mueller, and Agassi. The motivation for doing so would have been to allow a user to determine the significance of the changed data as it applies to the application. Therefore, it would have been obvious to combine Chiba with Holt, Mueller, and Agassi for the benefit of allowing a user to determine the significance of the changed data as it applies to the application to obtain the invention as specified in claim 9.

As per dependent claim 10, Holt, Mueller, Agassi, and Chiba teach the limitations of claim 9 as described above. Holt also teaches including a start position and an end position between which content in the object has changed (See Holt, Column 14, lines 17-61, Column 15, lines 51-67, and Column 16, lines 1-11).

As per dependent claim 11, Holt, Mueller, Agassi, and Chiba teach the limitations of claim 9 as described above. Chiba also teaches providing notification regarding the status of print data (See Chiba, Page 5, paragraph 0110). Holt, Mueller, Agassi and Chiba are analogous art because they are from the same field of endeavor of controlling printed information. At the time of the invention it would have been obvious to one of ordinary skill in the art to provide notification of a change of Chiba with the different page size of Holt, Mueller, Agassi, and Chiba. The motivation for doing so would have been to allow a user to change the paper size in a printer output device in order to accommodate the data. Therefore, it would have been obvious to combine Chiba with Holt, Mueller, Agassi, and Chiba for the benefit of allowing a user to change the paper size in a printer output device in order to accommodate the data to obtain the invention as specified in claim 11.

Response to Arguments

10. Applicant's arguments with respect to claims 1, 3-7, 9-12, and 17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurie Ries whose telephone number is (571) 272-4095. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached on (571) 272-4136.
12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Laurie Ries
Patent Examiner
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